MERCHANT UNTERSEEBOOTS

In the long history of submarines, only two full-sized submersibles have ever been built and operated as commercial vessels. Constructed without any offensive or defensive armaments, the DEUTSCHLAND and the BREMEN were created by a private shipping company as a way to circumvent the Royal Navy blockade of Germany during World War I.

Deutsche Ozean-Reederei GmbH, a privately-owned subsidiary firm was created by the North German Lloyd shipping company and the Deutsche Bank. Their sole purpose was to build a fleet of merchant submarines to move cargos clandestinely between Germany and the United States.

Before the German government declared unlimited warfare at sea, there was some sympathy in then-neutral America for the German cause. Ironically, it was U-boats which not only ended such feelings, but which largely drove America into the war on the side of Great Britain and France in April of 1917.

Before that, firms in the United States were in great need of high quality dyes that came mainly from Germany. Prior to the beginning of World War I, 75% of such materials were provided to American firms from German chemical companies.
At the same time, to support its war effort, Germany urgently needed American raw materials such as silver, nickel, tin and rubber that were largely unattainable via surface ships. A total of seven undersea merchant vessels was contemplated in order to move sufficient quantities of these vital items from America to Europe. Only two of them were actually completed and briefly used for civilian purposes.

Each of these unique vessels was 213 feet long overall. They were designed with unusually wide beams that measured 29 feet to provide space for cargo. Each sub's cargo capacity was listed as 700 tons, of which 230 was set aside for rubber to be stored in the free-flooding spaces between inner and outer hulls.

Total displacement of these underwater craft was 2,236 tons. Propulsion was provided by two diesels for surface operations and two electric motors for use when submerged. They were capable of attaining 12.4 knots on the surface and 5.2 knots, submerged. Their test depth was listed as being 160 feet.

The first of the planned seven submersibles was laid down in Flenberger, Germany in late 1915. By mid-March of the following year, she was structurally complete and being prepared for launching, as depicted on the right. At the base of her bow, can be seen her fixed diving planes and higher, on her starboard side, a recessed opening for housing her single anchor. She was christened as the DEUTSCHLAND on Tuesday, March 28, 1916 and completed shortly thereafter.
Before the DEUSCHLAND...referred to in German as a 'blockadebrecher'...went to sea for the first time [below], the British became aware of Germany's intent to use submarines in merchant trade with the United States. Great Britain protested to the American government, arguing that such vessels could not be stopped and inspected for contraband under international blockade rules.

The DEUTSCHLAND left Bremen, Germany on June 23, 1916 with a supposedly civilian crew of 29 under the command of Captain Paul König [left], formerly of the North German Lloyd company. In actuality, the majority of her crew were German naval reservists who had attended their nation's submarine training school.

She carried 750 tons of cargo, including 125 tons of patented chemical dyes in highly concentrated form. She also carried medicines, gemstones and mail. Her cargo was valued at $1.5 million in 1916 dollars, which would equate to roughly $32.7 million today.

Successfully evading the British blockade in the English Channel and British warships patrolling off the Virginia coast, the DEUTSCHLAND reached Baltimore harbor on July 9, 1916. She had traveled 4,225 nautical miles, although only a fraction of that distance...approximately 80 miles...was covered while submerged.

The sizable German-American community in Baltimore welcomed the sub and her crew. While the merchant submersible was in port, the American submarine pioneer Simon Lake inspected the submarine, then entered into an agreement in principle with representatives of the North German Lloyd line to build cargo-carrying submarines in the United States; a project which never came to fruition.
Before returning to Germany, the submarine's crew was treated to fancy dinners held in their honor and presented with a variety of gifts to celebrate their achievement. A medallion in their honor was created in limited quantity and distributed to local American customers, supporters and potential clients to help promote future submarine ventures.

The entire crew posed for photographs while in Baltimore [below], but...somewhat strangely...in front of a waterfront brick warehouse and not onboard or near their vessel. Captain Konig is standing in middle of this group, third from the left of the man in what appears to be a white mess cook's jacket.

German shipping agents sold the submarine’s cargo for a huge profit; reportedly equal to the more than four times the total cost of constructing the DEUTSCHLAND. Shown on the right leaving port assisted by a Baltimore harbor tug, the world's first merchant submarine carried a cargo that included 348 tons of rubber, 341 tons of nickel and 93 tons of tin back to Germany.

The DEUTSCHLAND arrived safely in her home port of Bremerhaven on August 25, 1916. In addition to her commercial success, the DEUTSCHLAND was the first German sub to cross the Atlantic.

Meanwhile, construction of Germany's merchant submarine, the BREMEN, had been completed, and she was being prepared to follow in her sister ship's wake.
The BREMEN left port in September of 1916, bound for Norfolk, Virginia, under the command of Captain Karl Schwartzkoph [left]. In addition to a cargo of chemical dyes and other items in demand in America, her captain was reportedly also carrying monetary credits in the amount of $10 million for Simon Lake for his use in financing the construction of merchant submarines in America for German commercial interests.

After leaving Germany, the BREMEN was never seen or heard from again. Her fate remains a total mystery. The only evidence ever found was an oil-stained life jacket from that sub which washed ashore in New England months after she had left her home port. The most likely cause of her demise is that she hit a mine; perhaps in the North Sea where thousands of mines were planted during World War I by the British as part of their effort to blockade Germany.

Undaunted by the lack of any news about the BREMEN, the crew of the DEUTSCHLAND sailed again in late 1916; this time bound for New London, Connecticut. Her low profile while on the surface once again allowed her to elude British warships most of the time she was at sea, requiring submergence only when enemy vessels appeared close enough to potentially spot her. None did.

Her cargo on that second successful outboard leg was valued at $10 million and consisted mostly of gems, securities and medicinal products. Upon her arrival in New London, local pro-German people celebrated her success. However, after a short stay, the submarine was ordered by North German Lloyd shipping agents to leave port as quickly as possible.

News of a German U-boat operating off Newport, Rhode Island that had sunk five Allied freighters just outside territorial waters of the United States had turned most Americans against the German cause. Carrying a cargo of several tons of silver bullion, the DEUTSCHLAND headed seaward on November 14, 1916.

Unfortunately, she rammed a tugboat while leaving harbor, sinking it and killing five men onboard the tug. Forced to return to New London for repairs, the sub spent another week in New London before setting sail again. Her return trip was uneventful. A third trip to America was planned for early 1917.
But by that time, the German government had adopted and was aggressively pursuing a policy of unrestricted naval warfare. Additional sinkings of Allied vessels, including passenger ships carrying innocent civilians...some American...resulted in the United States entering the war on the side of the Allies.

The merchant submarine DEUTSCHLAND was commandeered in February of 1917 by the German Imperial Navy and converted into an armed U-boat. She was fitted with torpedo tubes and deck guns [see following inboard profile] and renamed U-155. Her civilian crew was replaced by German Imperial Navy submariners.

Over the next several months, she made three highly successful war patrols, sinking 42 ships in all before the war ended. Many of these vessels were relatively small and were sunk by scuttling or gunfire.

In August of 1918, U-155 returned to the shores of North America for the last time. Her orders were to lay mines off St. Johns, Newfoundland and Halifax, Nova Scotia. In addition her crew was directed to locate and cut a telegraph cable between Maine with Nova Scotia. The former merchant sub, ill suited for either task, failed at both of them.

U-155 then made her way back to the U-boat base in Kiel, Germany, arriving on November 12, 1918; one day after the Armistice was signed that ended World War II. Twelve days later, she was surrendered along with all other German submarines as part of the terms of the Armistice.

The Royal Navy chose to take the former DEUTSCHLAND on a tour of British ports. For the next couple of years, she was towed up and down the coast of England, with her original name plastered on her sides.

British citizens were allowed to clamber about the submarine's interior, including her control room; depicted on the right.
One of her stops was dockside in the River Thames near London's famed Tower Bridge [right] where she was placed on exhibit for a lengthy period of time. Eventually, when the Royal Navy was done with her, U-155 was sold for scrap.

On September 17, 1921, she was in dry dock at a shipyard near Liverpool. Dismantlement work was in progress that morning, when about 11 AM there was a large explosion in the sub's engine room.

Three 17-year old shipyard apprentices were killed instantly. Two others died later in a hospital as a result of their injuries. The cause of that explosion was never positively determined.

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Throughout history, several nations have clandestinely moved small quantities of vital materials and personnel using military submarines. These were mostly stop-gap measures, and were not commercial in nature.

Toward the end of World War II, Japan and Germany modified a few of their undersea warships for purposes of transport and supply. These subs retained some of their armament, and were considered to be naval units...not merchant submarines.

Some very small and limited capability semi-submersible craft for moving narcotics around the Caribbean have been seen in recent years. These have been one-of-a-kind in design and manufacture, and operated almost completely below the surface of the sea, making them difficult but not impossible to spot.

Periodically, the idea of building merchant submarines is proposed. Economics, for the most part, have kept undersea commercial craft of any size from being constructed.

The idea of moving larger quantities of cargo or oil under the Arctic ice cap has been dreamed about for decades. A number of plans have been put forth, but nothing has ever come of this idea although the merchant unterseeboots briefly operated a century ago.